AMENDMENTS TO THE CLAIMS

Please cancel claim 1 without prejudice.

Please amend claims 3, 5, 9, 11-13 and 15.

1-2. (canceled)

3. (currently amended) An apparatus for cooling a fuel cell, which generates power by supplying air and a fuel gas, ~~comprising~~ having a circulation passage for circulating a cooling liquid between the fuel cell and a heat exchanger, the apparatus comprising:

a cooling liquid storage container, which stores at least a portion of the cooling liquid circulating within said circulation passage, and which communicates with said circulation passage via a gas drawing passage and via a passage for returning ~~a~~ the cooling liquid~~.~~;

an air pump for supplying the air to the fuel cell; and

a signal pressure pipe connected to a downstream side of the air pump and the cooling liquid storage container, wherein a pressure within the signal pressure pipe is changed by changing a rotation speed of the air pump,

wherein said cooling liquid storage container communicates with a supply air pipe, which supplies air into the fuel cell via ~~a~~ the signal pressure pipe, wherein said signal pressure pipe communicates with said ~~coolant~~ cooling liquid storage container and said supply air pipe to direct ~~the~~ a hydrogen gas in said ~~coolant~~ cooling liquid storage container to said supply air pipe, and

wherein the air incorporated into said signal pressure pipe from ~~the~~ a supply air pipe ~~side or from the exhaust air pipe side~~ is pushed back towards said supply air pipe ~~or said exhaust air pipe~~ to be exhausted in said supply air pipe ~~or said exhaust air pipe~~ when ~~the~~ a pressure of ~~the~~ a gas separated from the cooling liquid flowing from the circulation passage through said gas drawing passage and stored in said cooling liquid storage container is higher than ~~the~~ a pressure of the supply air within said supply air pipe ~~or the pressure of the exhaust air within said exhaust air pipe~~.

4. (previously presented) The apparatus according to Claim 3, further comprising:

means for changing the pressure of the air supplied into the fuel cell through the supply air pipe or the pressure of the air exhausted from the fuel cell through the exhaust air pipe whereby the gas is exhausted into said supply air pipe or said exhaust air pipe.

5. (previously presented) The apparatus according to Claim 4, wherein said means are configured to increase the pressure within said signal pressure pipe to be not less than a prescribed pressure and then returned to the stationary pressure.

6. (previously presented) The apparatus according to Claim 3, further comprising:

means for changing the pressure of the air supplied into the fuel cell through the supply air pipe or the pressure of the air exhausted from the fuel cell through the exhaust air pipe when the pressure difference between the pressure of the gas within said cooling liquid storage container and the pressure within the air within the supply air pipe or between said cooling liquid storage container and the pressure within the exhaust air pipe is not changed over a prescribed period.

7. (previously presented) The apparatus according to Claim 3, further comprising:

means for changing the pressure of the air supplied to the fuel cell from the supply air pipe when the fuel gas concentration within said cooling liquid storage container is not less than a prescribed concentration.

8. (original) The apparatus according to Claim 3, wherein the pressure of the air supplied to the fuel cell from the supply air pipe is changed when the fuel gas concentration within said cooling liquid storage container is considered to be increased.

9. (currently amended) An apparatus for cooling a fuel cell, which generates power by supplying air and a fuel gas, ~~comprising~~ having a circulation passage for circulating a cooling liquid between the fuel cell and a heat exchanger, ~~and~~ the apparatus comprising:

a cooling liquid storage container, which stores at least a portion of the cooling liquid circulating within said circulation passage~~.~~;

an air pump for supplying the air to the fuel cell; and

a flow-in pipe connected to a downstream side of the air pump and the cooling liquid storage container, wherein a pressure in the flow-in pipe is changed by changing a rotation speed of the air pump,

wherein said cooling liquid storage container ~~including~~ includes

a liquid phase portion that communicates with said circulation passage via a gas drawing passage, and

a gas phase portion that communicates with a supply air pipe, which supplies the air into said fuel cell via ~~a~~the flow-in pipe, and which mixes ~~the~~ a gas separated from the cooling liquid within said liquid phase portion with the air flowing therein through said flow-in pipe from said supply air pipe,

wherein said flow-in pipe communicates with said ~~coolant~~ cooling liquid storage container and said supply air pipe to direct the mixed gas in said gas phase portion of said ~~coolant~~ cooling liquid storage container to said supply air pipe.

10. (original) The apparatus according to Claim 9, wherein said gas phase portion possesses means for detecting a fuel gas, which detects the internal fuel cell concentration.

11. (currently amended) The apparatus according to Claim 10, which possesses pressure control means, which pushes back the gas within said gas phase portion to said supply gas pipe ~~or to an exhaust gas pipe from the fuel cell~~, when the fuel gas concentration within said gas phase portion is not less than a prescribed concentration.

12. (currently amended) The apparatus according to Claim 11, wherein said pressure control means is means, which increases the pressure within said ~~signal pressure~~flow-in pipe to be not less than a prescribed pressure and then returns the pressure to a stationary pressure.

13. (currently amended) An apparatus for cooling a fuel cell, which generates power by supplying air and a fuel gas, ~~comprising~~ having a circulation passage for circulating a cooling liquid between the fuel cell and a heat exchanger, ~~and~~ the apparatus comprising:

a cooling liquid storage container, which stores at least a portion of the cooling liquid circulating within said circulation passage~~.~~;

an air pump for supplying the air to the fuel cell; and

a flow-in pipe connected to a downstream side of the air pump and the cooling liquid storage container, wherein a pressure in the signal pressure pipe is changed by changing a rotation speed of the air pump,

wherein said cooling liquid storage container ~~including~~ includes

a liquid phase portion that communicates with said circulation passage via a gas drawing passage, and

a gas phase portion which communicates with a supply air pipe, which supplies air into said fuel cell via ~~a~~the flow-in pipe and via a flow-out pipe, and which mixes ~~the~~ a gas separated from the cooling liquid within said liquid phase portion with the air flowing therein through said flow-in pipe from said supply air pipe, and returns the mixed gas into said supply air pipe via said flow-out pipe,

wherein said flow-in pipe and said flow-out pipe ~~communicating~~ communicate with said cooling liquid storage container and said supply air pipe so that said flow-in pipe directs the air in said supply air pipe to said cooling liquid storage container and said flow-out pipe directs the mixed gas in said cooling liquid storage container to said supply air pipe,

wherein said flow-in pipe ~~communicating~~communicates with said supply air pipe at an upstream portion of a humidifier, which is provided on the way to said supply air pipe and which humidifies the air to be supplied to said fuel cell, and said flow-out pipe ~~communicating~~communicates with said supply air pipe at a downstream of said humidifier.

14. (original) The apparatus according to Claim 13, wherein said cooling liquid storage container possesses means for detecting a fuel gas, which detects the internal fuel cell concentration.

15. (currently amended) An apparatus for cooling a fuel cell, which generates power by supplying air and a fuel gas, ~~comprising~~ having a circulation passage for circulating a cooling liquid between the fuel cell and a heat exchanger, ~~and~~ the apparatus comprising:

a cooling liquid storage container, which stores at least a portion of the cooling liquid circulating within said circulation passage, communicates with said circulation passage via a gas drawing passage, and communicates with said circulation passage via a passage for returning a cooling liquid~~, and~~;

an air pipe in which the air supplied to said fuel cell flows~~, and~~;

an air pump for supplying the air to the fuel cell; and

a ventilation pipe connected to a downstream side of the air pump and the cooling liquid storage container, wherein a pressure in the ventilation pipe is changed by changing a rotation speed of the air pump,

wherein said cooling liquid storage container ~~including~~ includes

a gas exhaust mechanism, which communicates with said air pipe via ~~a~~the ventilation pipe, and which exhausts the fuel gas in said cooling liquid storage container out of the system by a ventilation current flowing within said ventilation pipe,

wherein said ventilation pipe communicates with said ~~coolant~~ cooling liquid storage container and said air pipe to direct the air in said air pipe to said ~~coolant~~ cooling liquid storage container.

16. (previously presented) The apparatus according to Claim 15, further comprising:

means for controlling a flow amount of said ventilation current depending upon the fuel gas concentration within said cooling liquid storage container.

17. (previously presented) The apparatus according to Claim 16, wherein said means are configured to increase a ventilation amount within said cooling liquid storage when the fuel gas concentration within said cooling liquid storage container arrives at a prescribed concentration or more.

18. (previously presented) The apparatus according to Claim 17, wherein said gas exhaust mechanism is configured to exhaust the gas within said cooling liquid storage container when the pressure within said air pipe is increased whereby said fuel gas concentration within said cooling liquid storage container is decreased to a prescribed concentration.

19. (previously presented) The apparatus according to Claim 16, wherein said means are configured to decrease the pressure within said cooling liquid storage container to increase the flow amount of said ventilation current when the fuel gas concentration within said cooling liquid storage container arrives at a prescribed concentration or more.